

4A-146

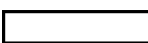
Chief, Communications Engineering Division, CC

11 September 1953

Chief, Communications Operations and Training Division, CC

25X1A

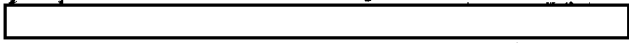
 Base Station Requirements

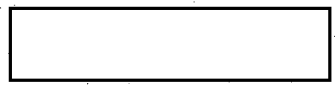
1. The Operational Specifications for the  Base Station are herewith submitted for your guidance and use in preparing engineering estimates.

25X1A

2. It is to be noted that at this time suitable cover for the base has not been developed, and formal coordination with the Department of State and Military will be required on questions of traffic loads and circuit termination.

25X1A

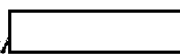
3. We do appreciate the outline submitted to us as a guide for the preparation of these specifications and should questions arise please call 



25X1A

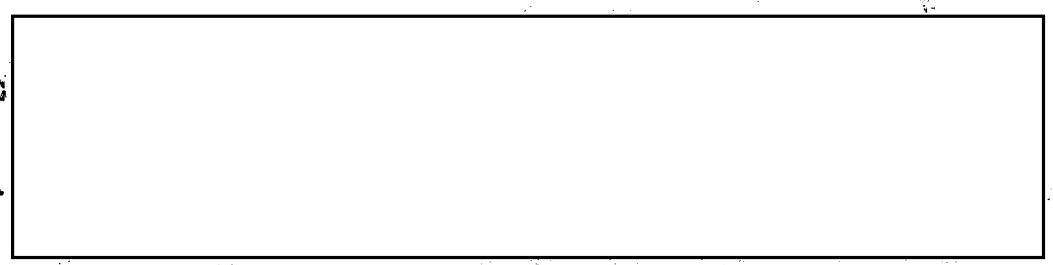
File:

25X1A

OPS  cc: OC-S
WAY OC-P
✓ CTS/CHRONO OPSA

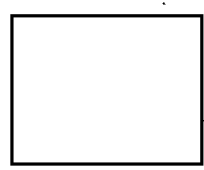
fmk

ORIG



25X1

25X1A



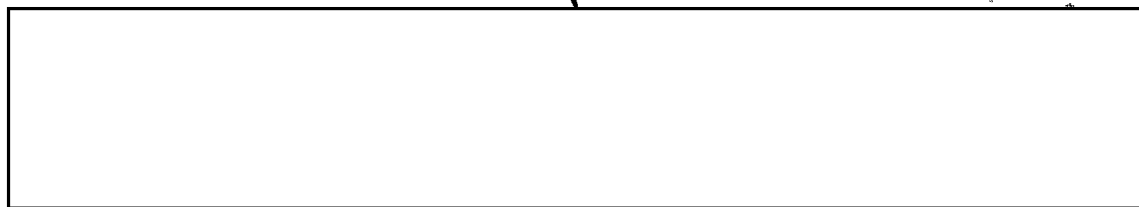
OPERATIONAL SPECIFICATIONS

BASE STATION

A. GENERAL

1. The [] base station is planned for the following purposes:

(a) To serve as a net control station for the [] network in the South Asia area, 25X1A



(d) To serve as a primary base for operations mounted in time of open hostilities. 25X1A

2. It is proposed that the receiver site be located at [] transmitter site at [] area headquarters signal center and warehouse at the []

3. The cover for the proposed base station has not been determined.

4. The logistic and Command channels have not been resolved.

5. Life of Buildings and Communications Facilities:

(a) Although it is necessary to construct the station in an austere manner as possible, it is necessary to have permanent type construction which will afford protection against high humidity, typhoons, and high temperature.

(b) The base should be constructed so that it is expandable to meet additional commitments, or altered to meet requirements which cannot be anticipated at this time.

6. The design of the buildings should conform with [] architecture and style. 25X1A

7. It is estimated that peacetime requirements will be 20 male personnel at the receiver site, and 10 male personnel at the transmitter site. Wartime requirements would probably quadruple the above figures.

~~SECRET~~

~~SECRET~~
Security Information

8. Facilities shared with other agencies:

a. It is planned that the station will be used exclusively for CIA.

b. Housing for Communications personnel will be provided by CIA in the [] housing area.

c. [] utilities will be used to the maximum extent possible, emergency generators, however, will be required at each site.

9. Storage Facilities:

a. The main Communications warehouse will be at the [] at [] with other Agency warehousing. However, each site should have its own maintenance and spare parts.

b. Fuel and water storage should be provided for two months operation.

D. ARCTIC

1. Building Layouts:

a. Office space will be required as follows:

(1) Transmitter Site

Chief Engineer	225 Sq. Ft.
Workshop	400 Sq. Ft.
Headspace	

(2) Receiver Site

Chief Base Station Office	225 Sq. Ft.
Day Room	225 Sq. Ft.
Code Room	225 Sq. Ft.
Base Station Supvr. Office	225 Sq. Ft.
Workshop	400 Sq. Ft.
Headspace	

2. Circuit Requirements:

a. Point to Point Radio (Staff)

(1) Manual CW

(a) Number of positions required: 5

NOTE: These positions are included in the total of 15 Manual Positions.

(b) Frequency range of equipment: 3 to 22 Mcs., or as close thereto as possible.

- (c) Locations of circuit termination: Receiver Site.
- (d) Estimated % full time operation: 18 hours.
- (e) Four reserve transmitters (MT-4's or equivalent).

(2) Automatic Telegraph

- (a) Number of tape sending positions: 1
- (b) Number of tape perforating positions (where located) 1 ✓
(adjacent to operating position)
- (c) Location of termination: Receiver Site
- (d) % full time operation: 10%
- (e) Transmitter/Position Ratio 2:1

(3) Radio Teletype

- (a) Termination of circuit: Receiver Site (TTY Room)
- (b) Number of simultaneous RATT circuits: 4 and room for 2
additional circuits located at Receiver Site (TTY Room).
- (c) % full time operation: 18 hours
- (d) Frequency range each circuit: 4-25 Mcs, or as close
thereto as possible

(4) Others:

- (a) Facilities for 2 voice circuits
- (b) A future requirement for circuitry is included in the
Great Circle area of 5000 mile radius from

25X1A

25X1C

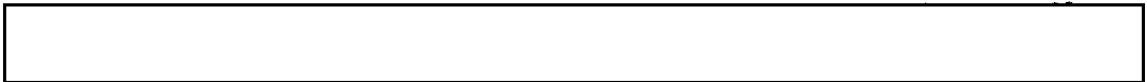
SECRET

Approved For Release 2002/08/21 : CIA-RDP84-00499R000800100024-2

(2) Number of manual CW positions required: Ten (10) manual CW positions.

NOTE: These are included in the over all total of 15.

(3) Five of these positions should be combination manual-automatic transmitting positions. 25X1A



(5) For circuit operation it is desirable that the commo supervisor have primary control of transmitter distribution; and in addition each operator should have frequency and "off-on" control of the transmitter assigned to that position. The multicoupler should be so positioned as to be controlled by the supervisor.

(6) A transmitter to position ratio of 2:1 will be required for each agent operating position.

c. Local Circuits:

(1) Inter-site Circuits

(a) One (1) Order printer circuit will be required to connect the receiver and transmitter site.

(b) Telephone channels will be required to connect the above sites.

(2) Telephone lines will be required into local facilities from the receiver site.

(3) An automatic telephone system will be required for intra-building communications.

d. Staff and Local Delivery Circuits

(1) Teletype circuits will be required from the receiver site 25X1A



(2) Answered in above.

(3) It is estimated RTX circuit will be used at 50% capacity during peacetime, CIA headquarters circuit 20-30% capacity during peacetime, CIA headquarters to RTX circuit 25% capacity during peacetime, [redacted] circuits 15-25% capacity during peacetime. Wartime requirements would be double or triple above. 25X1A

SECRET

SECRET

Approved For Release 2002/08/21 : CIA-RDP84-00499R000800100024-2

(4) The Office of Communications will maintain equipment at CIA Signal Center at [] and CIA receiver position, [] it is planned to have [] maintain equipment at []

25X1A

25X1A

25X1A

(5) Estimate million groups monthly on the receiver-NIX circuit, 100 to 200 thousand on the receiver-CIA Headquarters circuit, probably 20 to 50 thousand monthly on the circuits to [] 600,000 CIA Send- 25X1A
quarters-NIX circuit.

NOTE: The above traffic load is subject to the concurrence of the services involved.

(7) A security system [] or equivalent) will be required on this circuit between the receiver site and CIA Headquarters and possibly on the order printer circuit connecting the two sites.

25X1A

(8) In emergency, this station will be required to contact []

SECRET

Security Information

Approved For Release 2002/08/21 : CIA-RDP84-00499R000800100024-2